

## Department of Energy

## § 431.95

the choice of hot water, steam, or electric resistant heat, and that is industrial equipment.

*Seasonal energy efficiency ratio or SEER* means the total cooling output of a central air conditioner or central air-conditioning heat pump, expressed in Btu's, during its normal annual usage period for cooling and divided by the total electric power input, expressed in watt-hours, during the same period.

*Single package unit* means any central air conditioner or central air-conditioning heat pump in which all the major assemblies are enclosed in one cabinet.

*Single package vertical air conditioner* means air-cooled commercial package air conditioning and heating equipment that—

(1) Is factory-assembled as a single package that—

(i) Has major components that are arranged vertically;

(ii) Is an encased combination of cooling and optional heating components; and

(iii) Is intended for exterior mounting on, adjacent interior to, or through an outside wall;

(2) Is powered by a single-or 3-phase current;

(3) May contain 1 or more separate indoor grilles, outdoor louvers, various ventilation options, indoor free air discharges, ductwork, well plenum, or sleeves; and

(4) Has heating components that may include electrical resistance, steam, hot water, or gas, but may not include reverse cycle refrigeration as a heating means.

*Single package vertical heat pump* means a single package vertical air conditioner that—

(1) Uses reverse cycle refrigeration as its primary heat source; and

(2) May include secondary supplemental heating by means of electrical resistance, steam, hot water, or gas.

*Small commercial package air-conditioning and heating equipment* means commercial package air-conditioning and heating equipment that is rated below 135,000 Btu per hour (cooling capacity).

*Split system* means any central air conditioner or central air conditioning heat pump in which one or more of the

major assemblies are separate from the others.

*Standard size* means a packaged terminal air conditioner or packaged terminal heat pump with wall sleeve dimensions having an external wall opening of greater than or equal to 16 inches high or greater than or equal to 42 inches wide, and a cross-sectional area greater than or equal to 670 square inches.

*Very large commercial package air-conditioning and heating equipment* means commercial package air-conditioning and heating equipment that is rated—

(1) At or above 240,000 Btu per hour; and

(2) Below 760,000 Btu per hour (cooling capacity).

[69 FR 61969, Oct. 21, 2004, as amended at 70 FR 60415, Oct. 18, 2005; 73 FR 58828, Oct. 7, 2008; 74 FR 12073, Mar. 23, 2009]

### TEST PROCEDURES

#### § 431.95 Materials incorporated by reference.

(a) The Department incorporates by reference the following test procedures into subpart F of part 431. The Director of the Federal Register has approved the material listed in paragraph (b) of this section for incorporation by reference in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Any subsequent amendment to this material by the standard-setting organization will not affect the Department test procedures unless and until the Department amends its test procedures. The Department incorporates the material as it exists on the date of the approval and a notice of any change in the material will be published in the FEDERAL REGISTER.

(b) *List of test procedures incorporated by reference.* (1) Air-Conditioning and Refrigeration Institute (ARI) Standard 210/240-2003 published in 2003, "Unitary Air-Conditioning and Air-Source Heat Pump Equipment," IBR approved for § 431.96.

(2) ARI Standard 340/360-2004, "Performance Rating of Commercial and Industrial Unitary Air-Conditioning and Heat Pump Equipment."

(3) International Organization for Standardization (ISO) International Standard ISO 13256-1 published in 1998,

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## 10 CFR Ch. II (1–1–10 Edition)

“Water-source heat pumps—Testing and rating for performance—Part 1: Water-to-air and brine-to-air heat pumps,” IBR approved for § 431.96.

(4) ARI Standard 310/380–2004 (CSA–C744–04) published in 2004, “Standard for Packaged Terminal Air-Conditioners and Heat Pumps,” IBR approved for § 431.96.

(c) *Availability of references*—(1) *Inspection of test procedures*. You may inspect the test procedures incorporated by reference at:

(i) National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202–741–6030, or go to: [http://www.archives.gov/federal\\_register/code\\_of\\_federal\\_regulations/ibr\\_locations.html](http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html).

(ii) U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy, Hearings and Dockets, “Test Procedures and Efficiency Standards for Commercial Air Conditioners and Heat Pumps,” Docket No. EE–RM/TP–99–460, 1000 Independence Avenue, SW., Washington, DC 20585.

(2) *Obtaining copies of test procedures*. You may obtain a copy of the ARI standards from the Air-Conditioning and Refrigeration Institute, 4301 North Fairfax Drive, Suite 425, Arlington, VA

22203, <http://www.ari.org/>. You can purchase a copy of the ISO Standard 13256–1 from the International Organization for Standardization, Case Postale 56, CH–1211, Geneva 20, Switzerland. <http://www.iso.ch/> or from the American National Standards Institute, 25 West 43rd Street, New York, New York 10036.

[69 FR 61969, Oct. 21, 2004, as amended at 71 FR 71370, Dec. 8, 2006]

### § 431.96 Uniform test method for the measurement of energy efficiency of small, large, and very large commercial package air conditioning and heating equipment, packaged terminal air conditioners, and packaged terminal heat pumps.

(a) *Scope*. This section contains test procedures for measuring, pursuant to EPCA, the energy efficiency of any small, large, or very large commercial package air-conditioning and heating equipment, packaged terminal air conditioner, or packaged terminal heat pump.

(b) *Testing and calculations*. Determine the energy efficiency of each covered product by conducting the test procedure(s) listed in the rightmost column of Table 1 of this section, that apply to the energy efficiency descriptor for that product, category, and cooling capacity.

TABLE 1 TO § 431.96—TEST PROCEDURES FOR ALL SMALL COMMERCIAL PACKAGE AIR-CONDITIONING AND HEATING EQUIPMENT, FOR LARGE COMMERCIAL PACKAGE AIR-CONDITIONING AND HEATING EQUIPMENT, FOR VERY LARGE COMMERCIAL PACKAGE AIR-CONDITIONING AND HEATING EQUIPMENT, AND FOR PACKAGED TERMINAL AIR-CONDITIONERS, AND PACKAGED TERMINAL HEAT PUMPS

Product	Category	Cooling capacity	Energy efficiency descriptor	Use tests, conditions and procedures <sup>1</sup> in
Small Commercial Packaged Air Conditioning and Heating Equipment.	Air Cooled, 3 Phase, AC and HP.	<65,000 Btu/h .....	SEER ..... HSPF .....	ARI Standard 210/240–2003. ARI Standard 210/240–2003.
	Air Cooled AC and HP ....	≥65,000 Btu/h and <135,000 Btu/h	EER .....	ARI Standard 340/360–2004.
	Water Cooled and Evaporatively Cooled AC.	<65,000 Btu/h .....	EER .....	ARI Standard 210/240–2003.
		≥65,000 Btu/h and <135,000 Btu/h.	EER .....	ARI Standard 340/360–2004.
	Water-Source HP .....	<135,000 Btu/h .....	EER .....	ISO Standard 13256–1 (1998).
Large Commercial Packaged Air-Conditioning and Heating Equipment.	Air Cooled AC and HP ....	≥135,000 Btu/h and <240,000 Btu/h.	COP .....	ISO Standard 13256–1 (1998).
			EER .....	ARI Standard 340/360–2004.
			COP .....	ARI Standard 340/360–2004.
	Water Cooled AC .....	≥135,000 Btu/h and <240,000 Btu/h.	EER .....	ARI Standard 340/360–2004.
	Evaporatively Cooled AC	≥135,000 Btu/h and <240,000 Btu/h.	EER .....	ARI Standard 340/360–2004.